



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,214	05/08/2001	Guido Voit	48839DIV	4235

26474 7590 09/10/2003

KEIL & WEINKAUF
1350 CONNECTICUT AVENUE, N.W.
WASHINGTON, DC 20036

EXAMINER

SACKEY, EBENEZER O

ART UNIT PAPER NUMBER

1626

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,214	VOIT ET AL.	
	Examiner	Art Unit	
	EBENEZER SACKEY	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-48 is/are pending in the application.
- 4a) Of the above claim(s) 41-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/622,773.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>06/09/03</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claims 21-48 are pending. Claims 41-48 have been added.

Claims 21-25, 27 to 37, 39 and 40 have been amended. Additionally, the information disclosure statement filed with the amendment on 06/09/03 has been considered. The signed 1449 is attached herewith.

Withdrawal of Claims

Newly submitted claims 41-48 are directed to a catalyst composition, an invention that is independent or distinct from the invention originally claimed. An applicant cannot file an RCE to obtain continued examination on the basis of claims that are independent and distinct from the claims previously claimed and examined as a matter of right (i.e., an applicant cannot switch inventions). See 37 CFR 1.145.

Since applicants have received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 41-48 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

I. Claims 21-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dewdney (I) or (II) and Flick et al. for the reasons set forth in the last office action dated 12/24/02. Applicant's arguments are not deemed persuasive.

Applicant's arguments filed 06/09/03 have been fully considered but they are not persuasive. Applicants argue that Dewdney et al. disclose a particular iron oxide catalyst which is used for hydrogenating adiponitrile to hexamethylene diamine wherein the level of impurities can be controlled when the iron oxide is free from haematite, and that the iron to oxygen ratio in the catalyst corresponds to a spinel structure. Accordingly, according to applicants, Dewdney et al., prepare their catalyst from naturally occurring magnetite ore, optionally adding iron or iron oxide to the ore to achieve an iron oxide content of the catalyst of not less than 96.5%. This argument is unpersuasive and not germane to the instant claims because the instant claims are

directed to hydrogenation catalyst consisting essentially of iron or a compound based on iron or mixture thereof which reads on the disclosure of Dewdney et al. Applicants are not claiming away from the use of the composition containing iron impurities or lack thereof, but rather the iron or a compound based on iron or mixture thereof. The stipulated ratios of (b)-(d) are well within the disclosure of Dewdney et al. Note that Examples 1 and 2 are all within the parameters of claims 21 and 31. Applicant's perception of the invention is not what is in the claims, especially independent claims 21 and 33. Dewdney et al. disclose the essentials of the claims. In claim 22, magnetite is optional therefore it does not need to be in the claim. Limiting the scope of the claims to what the art does not disclose may obviate this rejection. Applicants next argue that there is nothing in the references that would motivate one of ordinary skill in the art to select specifically the additional elements which are defined in applicants' claims as constituents (b) (c) and (d). Contrary to applicant's assertion, the motivation arises from the fact similar catalyst as is the instant, would be expected to possess similar properties.

Applicants next argue that

The disclosure of *Flick et al.* relates to a catalyst wherein the catalytically effective composition is composed of

- i) a compound based on a metal selected from the group of nickel, cobalt, iron, ruthenium and rhodium;
- ii) from 0.01 to 25 wt.-%, based on (i), of a promoter based on metal selected from palladium, platinum, iridium, osmium, iron, copper, silver, gold, chromium, molybdenum, tungsten, manganese, rhenium, zinc, cadmium, lead, aluminum, tin, phosphorus, arsenic, antimony, bismuth and rare earth metals; and
- iii) from 0 to 5 wt.-%, based on (i), of a compound based on an alkali metal or an alkaline earth metal,

. Applicant's claims are very generic and therefore read on Flick et al. Moreover, no

showing of unexpected results or properties has been forthcoming. Applicants next argue that the teaching of Flick et al., contains nothing which would motivate one of ordinary skill in the art to select the promoter elements which characterize constituent (b) and to utilize them in numbers and amounts as required for constituent (b). The constituents and amounts are all well within the purview of the skilled artisan absent a showing of unexpected results or properties.

Applicants next argue that the combined references fails to suggest or imply the particular combinations of elements, which defined the instant claims. Again, no showing of unexpected results has been forth coming. Additionally, applicants have not shown that the catalyst of Flick et al., or Downey et al., is inoperative in a complete hydrogenation. There is no evidence that distinguishes the prior art from the instantly claimed subject matter. Accordingly, one of ordinary skill in the art would be motivated to manipulate process parameters of the references such as ratios (as note instant claims 21, 29-33 and 38-40) in order to improve yield and/or selectivity as taught. For the reasons of record, claims 21-40 are again rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (703) 305-6889. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (703) 308-4537. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

EOS

9/5/03

Joseph K. McKane

Supervisory Patent Examiner

Art Unit 1626, Group 1600
Technology Center 1

Alan L. Rotman

ALAN L. ROTMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600